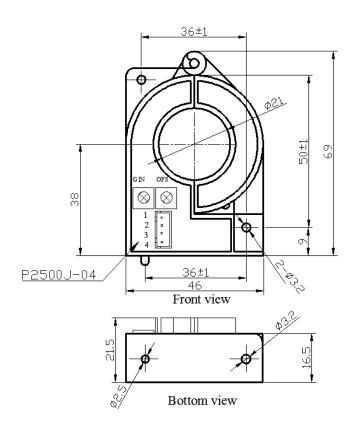# HDC-500HTR Series Hall Current Sensor

Introduction

HDC-500HTR Series Hall current transducer is the new generation product based on Hall effect. It is able to measure DC, AC, pulse and other currents with irregular waves under the condition of electrical isolation.

△Electrical Parameters (Ta＝25℃)

Type / Parameters	Symbols	HDC-100HTR	HDC-200HTR	HDC-300HTR	HDC-500HTR
Nominal measuring current	I_{PN}	100A	200A	300A	500A
Linear range	I_P	0~±300A	0~±600A	0~±900A	0~±1000A
Nominal output voltage	V_{SN}	±4V±0.04V(10KΩ)			
Zero offset voltage	Vo	≤±0.04V(I_{PN}=0)			
Temperature drift of bridge offset	V_{OT}	≤±1.5mV/℃	≤±1mV/℃		
Linear error	ξL	±0.5%			
Response time	Tr	≤5μS			
Supply voltage	Vc	±15V±5%			
Isolation voltage	V_d	3.0KV/50 or 60H$_Z$/1min			
Power dissipation current	I_C	±30mA			
Frequency bandwidth	f	DC~50KH$_Z$(-3dB)			
Operating temperature	Ta	-25℃~+85℃			
Storage temperature	Ts	-40℃~+90℃			

△Dimensions：(mm)

Front view

Bottom view

P2500J-04

Features：

◆ Use open-loop current transducer based on Hall effect
◆ Adopt UL94V-0-recognized insulated casing
◆ Small size and space saving
◆ Low power consumption
◆ High immunity against external disturbance

Applications：

◆ AC variable-frequency speed control system and servo motor
◆ Uninterruptible power suppers (UPS)
◆ Switched-mode power supply
◆ Power supply for electric welding machine

Instructions for Use：

◆ Connect the wire of transducer in correct way as required.
◆ Inputting measured current from input end of transducer, the in-phase voltage signal can be obtained from output end by sampling.

Connection and adjustment：

◆1：+Vc（+15V）
◆2：-Vc（-15V）
◆3：Output
◆4：0V
◆OFS：Offset
◆GIN：Gain